

### Technical Attachment

#### **Bernard's History of the NWS Learning Management System**

The NWS Training Program has greatly increased the number of training opportunities offered over the past few years. This training is offered not only as traditional in-residence classes, but also as distance learning approaches as teletraining, Webcasts, and Web modules. With such a wide variety of training now available via so many different media, it has become increasingly complex to schedule attendance and slot assignments for classes and teletraining sessions, and increasingly important for the NWS to track and record training accomplishments by its staff.

Several years ago the various NWS training centers (NWSTC, WDTB, COMET and VISIT) developed a requirement for a coordinated, national electronic system for course registration and tracking for residence and teletraining courses. Members of the NWS Distance Learning Group met with representatives from several vendors to define the system requirements. These were presented to the NWS Field Requirements Group (FRG), with an estimated implementation cost. The FRG asked the Distance Learning Group to refine their request and obtain bids from several vendors.

During that time the changes in the commercial software industry resulted in what had been Training Administration software packages growing into what are now called Learning Management Systems (LMSs). In addition to course registration and student tracking, most LMSs now include comprehensive features for the development, management and delivery of training.

Within the federal government the Department of Transportation formed a "Virtual University" (TVU) to serve as a facilitator between federal agencies and the commercial sector (<http://www.tvu.dot.gov>). The TVU would identify vendors of online training and LMSs, assist with the development of statements of work and, perhaps most importantly, find substitute vendors and ensure a smooth transition should the initial vendor leave the marketplace.

Some NOAA agencies (primarily NESDIS and parts of OFA) contracted with the TVU for access to online training. By piggybacking onto the NOAA-TVU contract, the NWS was able to begin the implementation of an LMS much more quickly, and with a greater guarantee of program stability, than would have been possible had we followed the usual RFP route. The NWS LMS Web site will occupy the third floor of the NOAA virtual building (<http://e-learning.noaa.gov>) on the government's virtual online learning campus.

The TVU chose GeoLearning, a company based in suburban Des Moines, Iowa, to administer the NOAA (and NWS) LMS. GeoLearning also developed the Gov Online Learning Center (<http://www.golearn.gov>) for the Office of Personnel Management. That site provides access at no charge to a small library of about 30 commercial online classes for all federal government employees. It may help to think of the GoLearn site as another virtual building on the government's virtual learning campus.

Since the NWS has a much greater variety of interactive, residence, teletraining, and locally developed training courses than most agencies or companies -- especially when compared to other parts of NOAA -- the Statement of Work for the NWS LMS is much more detailed than that for NESDIS. In fact, we're asking GeoLearning to do some things they've never done before. For that reason we should expect some growing pains as we implement the LMS over the coming months. GeoLearning is eager to include support for features such as teletraining and locally developed course work in the NWS LMS since it will better position them in their field.

Prior to the above actions, the online learning companies SkillSoft, NETg and Karta contracted with GeoLearning to market their catalogs of online courses. These are offered by GeoLearning as optional modules to their Learning Management System. The NWS elected to purchase those modules, and also the MyPlan (individual training plans) option as part of the NWS LMS. Since we don't know how useful the SkillSoft and NETg online course libraries will be for our employees, we initially purchased a limited number of access to the libraries with end-of-year funds. We have asked every Southern Region field office and division provide the names of three volunteers to help us evaluate those course libraries. We've also purchased a small number of access slots for the Karta IT Security library. SOD has already solicited volunteers for those slots.

Some have asked whether employees could gain college credit for completing the on-line courses offered through the NWS LMS. Currently, SkillSoft offers over 250 courses for academic credit consideration by University of Phoenix. More information, including the costs involved, is available on the TVU Web site at: <http://www.tvu.dot.gov/help/index.cfm?KEYPAGE=VIEWHELP&ID=22>

Access to the online courses is available now, and names are added to the access list at the start of each month. The initial launch of the NWS LMS site will occur later this year, and the training centers will begin populating the LMS with their course materials in the following months. Current plans are to begin using the LMS for registration for all NWS residence courses that will begin after April 1.

The NWS LMS will allow individuals the ability to keep track of their own training records, and allow local managers to track the training progress of staff at their office. The LMS will also provide a means to compile training evaluation and test results. Regional and Headquarters staff will be able to review summaries of training.

Training will be provided to all NWS employees on the use of the NWS LMS. In the meantime, everyone is encouraged to make use of the OPM sponsored GoLearn site (<http://www.golearn.gov>) and take one or more courses available through that site. (As always, check with your supervisor before enrolling in any training course.) You are also welcome to peruse the NOAA site (<http://e-learning.noaa.gov>) and review the Frequently Asked Questions (FAQ), recognizing you will not be able to use the Log On feature until the launch of the NWS LMS. Those who have volunteered to evaluate the SkillSoft, NETg and Karta courses will be notified by e-mail concerning when and how they can start taking those courses.

**References:**

Training Division, NWS Office of Climate, Water and Weather Services, 2002: The FY03 Implementation Plan for Training and Education (<http://www.nws.noaa.gov/om/os/org/training/IP03.pdf>).

Spayd, LeRoy Jr, 2002: Implementing a Learning Management System in the National Weather Service. American Meteorological Society, 12th Symposium on Education, (<http://ams.confex.com/ams/annual2003/12EDU/abstracts/51537.htm>).